

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Amend claims 1 and 3, as follows.
Add new claims 8-21.

Listing of Claims:

- 1 1. (**Amended**) A computer-implemented method for identifying in
- 2 a list of texts those texts whose edit distance from a search string is less
- 3 than a threshold value, said method comprising:
- 4 (a) obtaining by a computer the search string and the threshold
- 5 value;
- 6 (b) selecting by the computer a first text from the list of texts as a
- 7 present computation text;
- 8 (c) computing by the computer, column-by-column, a grid of edit
- 9 distance values between the search string and the present computation
- 10 text;
- 11 (d) stopping the computing in response to computing a column
- 12 whose minimum value of edit distance is at least the threshold value;
- 13 (e) in response to completing the computing and the computed edit
- 14 distance from the present computation text to the search string being
- 15 below the threshold value, generating by the computer an indication that
- 16 the edit distance of the present computation text from the search string is
- 17 less than the threshold value;
- 18 (f) in response to either stopping the computing, or completing the
- 19 computing and the edit distance from the present computation text to the
- 20 search string not being below the threshold value, ~~forbearing from the~~
- 21 ~~indicating;~~ generating by the computer an indication that the edit distance
- 22 of the present computation text from the search string is not less than the
- 23 threshold value;

24 (g) in response to completing the computing, selecting by the
25 computer a next text, in the list after the present computation text, as the
26 present computation text;

27 (h) in response to stopping the computing, selecting by the
28 computer a next text, in the list after the present computation text, that
29 does not share with the present computation text a prefix corresponding to
30 columns of the grid up to and including the column whose minimum value
31 of edit distance is at least the threshold value, as the present computation
32 text;

33 (i) in response to step (h), returning to steps step (c)-et-seq.;

34 (j) in response to step (g), returning to steps step (c)-et-seq., but re-
35 using in step (c) columns of the grid computed for previous said
36 computation text that correspond to any prefix shared by the previous
37 computation text and the present computation text; and

38 (k) continuing to perform steps (c)-~~et-seq.~~ through (j) until selecting
39 step (g) or step (h) reaches an end of the text list.

1 2. **(Previously presented)** The method of claim 1, further
2 comprising:

3 ordering the text list in a sequence to place texts with shared
4 prefixes adjacent one to another in the sequence.

1 3. **(Amended)** The method of claim 1, wherein the step of
2 computing further comprises the steps of:

3 after an individual column is computed, identifying a range of rows
4 of the grid extending from a first row that includes a ~~the~~ cell of the
5 individual column that has an edit distance value lower than the threshold
6 value to a last row that includes a cell of the individual column that has an
7 edit distance value lower than the threshold value;

8 in a next column, not computing the edit distance values of the cells
9 in rows of the grid that are below this range, in response to a border cell of
10 the next column having an edit distance value at least equal to the
11 threshold value;

12 in the next column, computing the edit distance values of the cells
13 in rows of the grid that are below this range, in response to the border cell
14 of the next column having an edit distance value lower than the threshold
15 value;

16 in the next column, computing the edit distance values of the cells
17 in rows of the grid that are in this range and one higher; and

18 in the next column, computing the edit distance value of each of the
19 individual cells in rows of the grid that are above this range, based only on
20 the edit distance value of a cell that is below the individual cell, only until a
21 cell with an edit distance value at least equal to the threshold value is
22 computed.

1 **4. (Previously presented)** The method of claim 1, wherein the
2 columns of the grid correspond to characters of the computation text and
3 rows of the grid correspond to characters of the search string, the method
4 further comprising the steps of:

5 making an alternative list of texts to an original said list of texts in
6 which each occurrence in the texts of a character in a set of characters is
7 replaced by a determined character in the set;

8 in response to the search string lacking all characters in said set of
9 characters, using the alternative list of texts rather than the original list of
10 texts to identify those texts whose edit distance from the search string is
11 less than the threshold value; and

12 in response to the search string not lacking all characters in said
13 set, using the original list of texts to identify those texts whose edit
14 distance from the search string is less than the threshold value.

1 **5. (Previously presented)** The method of claim 1, wherein the
2 columns of the grid correspond to characters of the computation text and
3 rows of the grid correspond to characters of the search string, and wherein
4 the step of-computing comprises the steps of:
5 re-using a column of the grid of the previous computation text for an
6 individual column of the grid of the present computation text, in response
7 to the present computation text not being a first said selected computation
8 text and a preceding column of the grid of the present computation text
9 having same edit distance values as a preceding column of the grid of the
10 previous computation text, and at least one of the following conditions
11 being true:
12 the character corresponding to the individual column of the grid of
13 the present computation text and the character corresponding to the
14 column of the previous computation text are a same character,
15 the search string lacks the character corresponding to the individual
16 column of the grid of the present computation text and the character
17 corresponding to the column of the previous computation text; and
18 otherwise computing the individual column of the grid of the present
19 computation text.

1 **6. (Previously presented)** The method of claim 1, further
2 comprising:
3 prior to step (b), sorting the texts in the list in lexicographical order.

1 **7. (Previously presented)** The method of claim 1 wherein:
2 computing comprises
3 using dynamic programming to perform the computing.

- 1 8. **(New)** A system for identifying in a list of texts those texts
- 2 whose edit distance from a search string is less than a threshold
- 3 value, said system comprising:
- 4 a computer operable to
- 5 (a) obtain the search string and the threshold value;
- 6 (b) select a first text from the list of texts as a present computation
- 7 text;
- 8 (c) compute, column-by-column, a grid of edit distance values
- 9 between the search string and the present computation text;
- 10 (d) stop the computing in response to computing a column whose
- 11 minimum value of edit distance is at least the threshold value;
- 12 (e) in response to completing the computing and the computed edit
- 13 distance from the present computation text to the search string being
- 14 below the threshold value, generate an indication that the edit distance of
- 15 the present computation text from the search string is less than the
- 16 threshold value;
- 17 (f) in response to either stopping the computing, or completing the
- 18 computing and the edit distance from the present computation text to the
- 19 search string not being below the threshold value, generate an indication
- 20 that the edit distance of the present computation text from the search
- 21 string is not less than the threshold value;
- 22 (g) in response to completing the computing, select a next text, in
- 23 the list after the present computation text, as the present computation text;
- 24 (h) in response to stopping the computing, select a next text, in the
- 25 list after the present computation text, that does not share with the present
- 26 computation text a prefix corresponding to columns of the grid up to and
- 27 including the column whose minimum value of edit distance is at least the
- 28 threshold value, as the present computation text;
- 29 (i) in response to step (h), return to step (c);

30 (j) in response to step (g), return to step (c), but re-using in step (c)
31 columns of the grid computed for previous said computation text that
32 correspond to any prefix shared by the previous computation text and the
33 present computation text; and
34 (k) continue to perform steps (c) through (j) until step (g) or step (h)
35 reaches an end of the text list.

1 9. (New) The system of claim 8, wherein the computer is operable
2 to:
3 order the text list in a sequence to place texts with shared prefixes
4 adjacent one to another in the sequence.

1 10. (New) The system of claim 8, wherein the computer is
2 operable at step (c) to:
3 after an individual column is computed, identify a range of rows of
4 the grid extending from a first row that includes a cell of the individual
5 column that has an edit distance value lower than the threshold value to a
6 last row that includes a cell of the individual column that has an edit
7 distance value lower than the threshold value;
8 in a next column, not compute the edit distance values of the cells
9 in rows of the grid that are below this range, in response to a border cell of
10 the next column having an edit distance value at least equal to the
11 threshold value;
12 in the next column, compute the edit distance values of the cells in
13 rows of the grid that are below this range, in response to the border cell of
14 the next column having an edit distance value lower than the threshold
15 value;
16 in the next column, compute the edit distance values of the cells in
17 rows of the grid that are in this range and one higher; and

18 in the next column, compute the edit distance value of each of the
19 individual cells in rows of the grid that are above this range, based only on
20 the edit distance value of a cell that is below the individual cell, only until a
21 cell with an edit distance value at least equal to the threshold value is
22 computed.

1 11. **(New)** The system of claim 8, wherein the columns of the grid
2 correspond to characters of the computation text and rows of the grid
3 correspond to characters of the search string, and wherein the computer is
4 further operable to:
5 make an alternative list of texts to an original said list of texts in
6 which each occurrence in the texts of a character in a set of characters is
7 replaced by a determined character in the set;
8 in response to the search string lacking all characters in said set of
9 characters, use the alternative list of texts rather than the original list of
10 texts to identify those texts whose edit distance from the search string is
11 less than the threshold value; and
12 in response to the search string not lacking all characters in said
13 set, use the original list of texts to identify those texts whose edit distance
14 from the search string is less than the threshold value.

1 12. **(New)** The system of claim 8, wherein the columns of the grid
2 correspond to characters of the computation text and rows of the grid
3 correspond to characters of the search string, and wherein the computer is
4 operable at step (c) to:
5 re-use a column of the grid of the previous computation text for an
6 individual column of the grid of the present computation text, in response
7 to the present computation text not being a first said selected computation
8 text and a preceding column of the grid of the present computation text
9 having same edit distance values as a preceding column of the grid of the

10 previous computation text, and at least one of the following conditions
11 being true:
12 the character corresponding to the individual column of the grid of
13 the present computation text and the character corresponding to the
14 column of the previous computation text are a same character,
15 the search string lacks the character corresponding to the individual
16 column of the grid of the present computation text and the character
17 corresponding to the column of the previous computation text; and
18 otherwise compute the individual column of the grid of the present
19 computation text.

1 13. **(New)** The system of claim 8, wherein the computer is further
2 operable to:
3 prior to step (b), sort the texts in the list in lexicographical order.

1 14. **(New)** The system of claim 8, wherein:
2 the computer is adapted to use dynamic programming to computer
3 the grid.

1 15. **(New)** A computer-readable medium containing instructions
2 which, when executed by a computer, cause the computer to identify in a
3 list of texts those texts whose edit distance from a search string is less
4 than a threshold value, by performing steps comprising:
5 (a) obtaining the search string and the threshold value;
6 (b) selecting a first text from the list of texts as a present
7 computation text;
8 (c) computing, column-by-column, a grid of edit distance values
9 between the search string and the present computation text;
10 (d) stopping the computing in response to computing a column
11 whose minimum value of edit distance is at least the threshold value;

12 (e) in response to completing the computing and the computed edit
13 distance from the present computation text to the search string being
14 below the threshold value, generating an indication that the edit distance
15 of the present computation text from the search string is less than the
16 threshold value;

17 (f) in response to either stopping the computing, or completing the
18 computing and the edit distance from the present computation text to the
19 search string not being below the threshold value, generating an indication
20 that the edit distance of the present computation text from the search
21 string is not less than the threshold value;

22 (g) in response to completing the computing, selecting a next text,
23 in the list after the present computation text, as the present computation
24 text;

25 (h) in response to stopping the computing, selecting a next text, in
26 the list after the present computation text, that does not share with the
27 present computation text a prefix corresponding to columns of the grid up
28 to and including the column whose minimum value of edit distance is at
29 least the threshold value, as the present computation text;

30 (i) in response to step (h), returning to step (c)

31 (j) in response to step (g), returning to step (c), but re-using in step
32 (c) columns of the grid computed for previous said computation text that
33 correspond to any prefix shared by the previous computation text and the
34 present computation text; and

35 (k) continuing to perform steps (c) through (j) until step (g) or step
36 (h) reaches an end of the text list.

1 16. (New) The medium of claim 15, further containing instructions
2 which cause the computer to perform:

3 ordering the text list in a sequence to place texts with shared
4 prefixes adjacent one to another in the sequence.

1 17. (New) The medium claim 15, wherein the instructions cause
2 the computer to perform the step of computing by further performing steps
3 comprising:
4 after an individual column is computed, identifying a range of rows
5 of the grid extending from a first row that includes a cell of the individual
6 column that has an edit distance value lower than the threshold value to a
7 last row that includes a cell of the individual column that has an edit
8 distance value lower than the threshold value;
9 in a next column, not computing the edit distance values of the cells
10 in rows of the grid that are below this range, in response to a border cell of
11 the next column having an edit distance value at least equal to the
12 threshold value;
13 in the next column, computing the edit distance values of the cells
14 in rows of the grid that are below this range, in response to the border cell
15 of the next column having an edit distance value lower than the threshold
16 value;
17 in the next column, computing the edit distance values of the cells
18 in rows of the grid that are in this range and one higher; and
19 in the next column, computing the edit distance value of each of the
20 individual cells in rows of the grid that are above this range, based only on
21 the edit distance value of a cell that is below the individual cell, only until a
22 cell with an edit distance value at least equal to the threshold value is
23 computed.

1 18. (New) The medium of claim 15, wherein the columns of the
2 grid correspond to characters of the computation text and rows of the grid
3 correspond to characters of the search string, the medium further
4 containing instructions which cause the computer to perform steps
5 comprising:

6 making an alternative list of texts to an original said list of texts in
7 which each occurrence in the texts of a character in a set of characters is
8 replaced by a determined character in the set;
9 in response to the search string lacking all characters in said set of
10 characters, using the alternative list of texts rather than the original list of
11 texts to identify those texts whose edit distance from the search string is
12 less than the threshold value; and
13 in response to the search string not lacking all characters in said
14 set, using the original list of texts to identify those texts whose edit
15 distance from the search string is less than the threshold value.

1 19. (New) The medium of claim 15, wherein the columns of the
2 grid correspond to characters of the computation text and rows of the grid
3 correspond to characters of the search string, and wherein the instructions
4 cause the computer to perform the step of computing by performing steps
5 comprising:
6 re-using a column of the grid of the previous computation text for an
7 individual column of the grid of the present computation text, in response
8 to the present computation text not being a first said selected computation
9 text and a preceding column of the grid of the present computation text
10 having same edit distance values as a preceding column of the grid of the
11 previous computation text, and at least one of the following conditions
12 being true:
13 the character corresponding to the individual column of the grid of
14 the present computation text and the character corresponding to the
15 column of the previous computation text are a same character,
16 the search string lacks the character corresponding to the individual
17 column of the grid of the present computation text and the character
18 corresponding to the column of the previous computation text; and

19 otherwise computing the individual column of the grid of the present
20 computation text.

1 20. **(New)** The medium of claim 15, further containing instructions
2 which cause the computer to perform:
3 prior to step (b), sorting the texts in the list in lexicographical order.

1 21. **(New)** The medium of claim 15 wherein the instructions cause
2 the computer to perform the step of computing by using dynamic
3 programming.